# Hideaki Sawada

List of Publications by Year
in descending order



| 78 | 4,146 | 331538 21 | 110317 64 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 79 | 79 | 79 | 3576 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Room-temperature magnetoresistance in an oxide material with an ordered double-perovskite structure. Nature, 1998, 395, 677-680. | 13.7 | 1,883 |
| 2 | Intergrain tunneling magnetoresistance in polycrystals of the ordered double perovskiteSr2FeReO6. Physical Review B, 1999, 59, 11159-11162. | 1.1 | 438 |
| 3 | Band Theory for Ground-State Properties and Excitation Spectra of PerovskiteLaMO3(M=Mn, Fe, Co,) Tj ETQq1 1 0.784314 rgBT /Ove | 2.9 | 266 |
| 4 | Jahn-Teller distortion and magnetic structures inLaMnO3. Physical Review B, 1997, 56, 12154-12160. | 1.1 | 164 |
| 5 | First-principles study on electronic structures and phase stability of MnO and FeO under high pressure. Physical Review B, 1999, 59, 762-774. | 1.1 | 116 |
| 6 | Orbital and magnetic orderings in localizedt2gsystems,YTiO3andYVO3: Comparison with a more itinerantegsystemLaMnO3. Physical Review B, 1998, 58, 6831-6836. | 1.1 | 114 |
| 7 | First-principles calculation of the interaction between nitrogen atoms and vacancies in silicon. Physical Review B, 2000, 62, 1851-1858. | 1.1 | 107 |
| 8 | Electronic structure of oxygen vacancy in Ta2O5. Journal of Applied Physics, 1999, 86, 956-959. | 1.1 | 102 |
| 9 | Orbital and spin orderings inYVO3andLaVO3in the generalized gradient approximation. Physical Review B, 1996, 53, 12742-12749. | 1.1 | 82 |
| 10 | Inverse versus Normal NiAs Structures as High-Pressure Phases of FeO and MnO. Physical Review Letters, 1998, 81, 1027-1030. | 2.9 | 65 |
| 11 | The Dependence of the Superconducting Transition upon the Quench Temperature of YBa2Cu3Oy. Japanese Journal of Applied Physics, 1987, 26, L1054-L1056. | 0.8 | 62 |
| 12 | Magnetic susceptibility of normal state and superconductivity of La2â^'xSrxCuO4. Physica C: Superconductivity and Its Applications, 1990, 166, 417-422. | 0.6 | 45 |
| 13 | First-principles study of interface structure and energy of Fe/NbC. Modelling and Simulation in Materials Science and Engineering, 2013, 21, 045012. | 0.8 | 38 |
| 14 | Chemical misfit origin of solute strengthening in iron alloys. Acta Materialia, 2017, 131, 445-456. | 3.8 | 36 |
| 15 | Structural, electronic, and magnetic properties ofFe16N2. Physical Review B, 1994, 50, 10004-10008. | 1.1 | 34 |
| 16 | Theoretical study of orbital ordering in YTiO3. Physica B: Condensed Matter, 1997, 237-238, 46-47. | 1.3 | 34 |
| 17 | Study on copper valency of high-tc superconductor YBa2Cu3O7â^'y by high temperature X-ray absorption spectroscopy. Solid State Communications, 1988, 65, 213-217. | 0.9 | 33 |
| 18 | Superconductivity and Crystal Structure of LaBa2Cu3-xOyCompounds. Japanese Journal of Applied Physics, 1987, 26, L1703-L1706. | 0.8 | 28 |

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|---|---|---|---|
| 19 | First-principles study on the grain boundary embrittlement of bcc-Fe by Mn segregation. Physical Review Materials, 2019, 3, . | 0.9 | 23 |
| 20 | Study of the Infrared Properties of (La1-xSrx)2CuO4. Japanese Journal of Applied Physics, 1987, 26, L426-L428. | 0.8 | 21 |
| 21 | Full-Potential KKR Calculations for Point Defect Energies in Metals, based on the Generalized-Gradient Approximation: II. Impurity-Impurity Interaction Energies and Phase Diagrams. Materials Transactions, 2001, 42, 2216-2224. | 0.4 | 21 |
| 22 | Atomistic model of nitrogen-pair diffusion in silicon. Physical Review B, 2002, 65, . | 1.1 | 21 |
| 23 | Preparation and Property of La1.85Sr0.15CuO4Single Crystal. Japanese Journal of Applied Physics, 1987, 26, L386-L387. | 0.8 | 20 |
| 24 | First-principles analysis of the grain boundary segregation of transition metal alloying elements in Î³Fe. Computational Materials Science, 2022, 210, 111050. | 1.4 | 20 |
| 25 | Electronic band structure and lattice distortion in perovskite transition-metal oxides. Physica B: Condensed Matter, 1997, 237-238, 11-13. | 1.3 | 19 |
| 26 | Electronic origin of grain boundary segregation of Al, Si, P, and S in bcc-Fe: combined analysis of ab initio local energy and crystal orbital Hamilton population. Modelling and Simulation in Materials Science and Engineering, 2021, 29, 015001. | 0.8 | 18 |
| 27 | Partitioning of Cr and Si between cementite and ferrite derived from first-principles thermodynamics. Acta Materialia, 2016, 102, 241-250. | 3.8 | 17 |
| 28 | Transition of the Interface between Iron and Carbide Precipitate From Coherent to Semi-Coherent. Metals, 2017, 7, 277. | 1.0 | 17 |
| 29 | Infrared properties of the oxygen-deficient triperovskite YBa2Cu3Oy compound. Solid State Communications, 1987, 64, 1047-1050. | 0.9 | 16 |
| 30 | Effects of the surface and interface on the magneto-optical properties in (Co, Ni)/Cu(001) ultrathin films. Physical Review B, 1996, 54, 15950-15957. | 1.1 | 16 |
| 31 | First-principles study of grain boundary embrittlement in Feâ€“Niâ€“S alloy. Computational Materials Science, 2012, 55, 17-22. | 1.4 | 16 |
| 32 | Dependence of Carbon Concentration and Alloying Elements on the Stability of Iron Carbides. ISIJ International, 2019, 59, 1128-1135. | 0.6 | 16 |
| 33 | Theoretical Prediction of Grain Boundary Segregation Using Nano-Polycrystalline Grain Boundary Model. Materials Transactions, 2021, 62, 575-581. | 0.4 | 14 |
| 34 | Changes in States of Carbon and Mechanical Properties with Aging at 50Â°C after Quenching in Low Carbon Steel. Materials Transactions, 2020, 61, 668-677. | 0.4 | 14 |
| 35 | Prediction of thermodynamic properties of solute elements in Si solutions using first-principles calculations. Acta Materialia, 2003, 51, 551-559. | 3.8 | 13 |
| 36 | Interaction between Substitutional and Interstitial Elements in α iron Studied by First-principles Calculation. Materials Transactions, 2005, 46, 1140-1147. | 0.4 | 13 |

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|---|---|---|---|
| 37 | Superconducting Properties of La1.85Sr0.15CuO4Made by Hot-Press and Sinter Methods. Japanese Journal of Applied Physics, 1987, 26, L311-L313. | 0.8 | 11 |
| 38 | A Mechanism of Carbon-Cluster Strengthening through Atomic Simulations. Materials Transactions, 2020, 61, 2139-2148. | 0.4 | 11 |
| 39 | Theoretical Prediction of Grain Boundary Segregation Using Nano-Polycrystalline Grain Boundary Model. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2020, 84, 237-243. | 0.2 | 10 |
| 40 | Identification of a Structure with Two Superconducting Phases in L-Ba-Cu-O System (L=La or Y). Japanese Journal of Applied Physics, 1987, 26, L621-L623. | 0.8 | 9 |
| 41 | Application of Grain Boundary Segregation Prediction Using a Nano-Polycrystalline Grain Boundary Model to Transition Metal Solute Elements: Prediction of Grain Boundary Segregation of Mn and Cr in bcc-Fe Polycrystals. Materials Transactions, 2022, 63, 269-277. | 0.4 | 9 |
| 42 | Anomalous enhancement of superconductivity observed in La2CuO4â^'y. Solid State Communications, 1988, 65, 1539-1543. | 0.9 | 8 |
| 43 | Electronic band structure of La1 â^' xBaxMnO3. Journal of Physics and Chemistry of Solids, 1995, 56, 1719-1720. | 1.9 | 8 |
| 44 | Interaction between Substitutional and Interstitial Elements in .ALPHA.-Fe Studied by First-Principles Calculation. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2004, 68, 977-982. | 0.2 | 8 |
| 45 | Orbital and charge orderings and magnetism in perovskite-type transition-metal oxides. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 1999, 63, 11-16. | 1.7 | 7 |
| 46 | Effects of Alloying Elements on Hydrogen Diffusion in Iron. ISIJ International, 2021, 61, 1287-1293. | 0.6 | 7 |
| 47 | Application of Grain Boundary Segregation Prediction Using a Nano-Polycrystalline Grain Boundary Model to Transition Metal Solute Elements: Prediction of Grain Boundary Segregation of Mn and Cr in bcc-Fe Polycrystals. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2021, 85, 421-429. | 0.2 | 7 |
| 48 | An answer to the carbon cluster in low-temperature aged ferritic low-carbon steel. Materials Characterization, 2020, 159, 110006. | 1.9 | 6 |
| 49 | Characterization of age hardening mechanism of low-temperature aged low-carbon steel by transmission electron microscopy. Materials Characterization, 2022, 183, 111579. | 1.9 | 6 |
| 50 | Weak Flax-Pinning Effect between 230 K and 40 K in La1.8Sr0.2CuO4. Japanese Journal of Applied Physics, 1987, 26, L383-L385. | 0.8 | 5 |
| 51 | Anomalous enhancement of fractional volume of superconductivity in La2CuO4â^'y due to field cooling process. Physica C: Superconductivity and Its Applications, 1988, 153-155, 1495-1496. | 0.6 | 5 |
| 52 | The Magneto-Optical Quantum Size Effect in bcc-Fe(001) and (110) Ultrathin Films. Materials Research Society Symposia Proceedings, 1995, 382, 237. | 0.1 | 5 |
| 53 | Phase stability and magnetic property of LaCo1 â^' xNixO3. Journal of Physics and Chemistry of Solids, 1995, 56, 1755-1757. | 1.9 | 5 |
| 54 | Changes in States of Carbon and Mechanical Properties with Aging at 50â„ƒ after Quenching in Low Carbon Steel. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2019, 83, 353-362. | 0.2 | 5 |

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| 55 | Analysis of the dynamic behavior and local structure of solid-solution carbon in age-hardened low-carbon steels by soft X-ray absorption spectroscopy. Materialia, 2020, 14, 100876. | 1.3 | 5 |
| 56 | Interaction between hydrogen and solute atoms in bcc iron. Computational Materials Science, 2021, 198, 110652. | 1.4 | 5 |
| 57 | Jahn-Teller distortion and magnetic structures in LaMnO3. Journal of Magnetism and Magnetic Materials, 1998, 177-181, 879-880. | 1.0 | 4 |
| 58 | Effect of B on Growth of Recrystallized Grain of Ti-added Ultra-low Carbon Cold-rolled Steel Sheets. ISIJ International, 2018, 58, 1901-1909. | 0.6 | 4 |
| 59 | AN ATTEMPT OF FIRST PRINCIPLE CALCULATION OF ALLOY PHASE DIAGRAM. , 1991, , 779-784. | | 4 |
| 60 | First-principles computational tensile test of Î³-Fe grain boundaries considering the effect of magnetism: Electronic origin of grain boundary embrittlement due to Zn segregation. Physical Review Materials, 2022, 6, . | 0.9 | 4 |
| 61 | Magnetization Property of Annealed La1.85Sr0.15CuO4from 300 K to 5 K. Japanese Journal of Applied Physics, 1987, 26, L316-L317. | 0.8 | 3 |
| 62 | The 36K and 40K superconductivities of La2CuO4â^'y. Synthetic Metals, 1989, 29, 735-740. | 2.1 | 3 |
| 63 | Observation of Chemical State for Interstitial Solid Solution of Carbon in Low-carbon Steel by Soft X-ray Absorption Spectroscopy. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2018, 104, 628-633. | 0.1 | 3 |
| 64 | Crystal Structure Analysis of Top Dross in Molten Zinc Bath by First Principles Calculation and Synchrotron X-ray Diffraction. ISIJ International, 2021, 61, 929-936. | 0.6 | 3 |
| 65 | Electronic structure analysis of magnetic properties of Fe16N2. Journal of Computer-Aided Materials Design, 1993, 1, 75-84. | 0.7 | 2 |
| 66 | Mechanism of Grain Boundary Embrittlement in Feâ€“Niâ€“S Alloys. ISIJ International, 2013, 53, 1289-1291. | 0.6 | 2 |
| 67 | Improvement of Anti-aging Property at Low Temperature by Cr Addition in Bake Hardenable Ultra Low Nitrogen Steels. ISIJ International, 2015, 55, 2648-2656. | 0.6 | 2 |
| 68 | Effect of B on Growth of Recrystallized Grain of Ti-added Ultra-low Carbon Cold-rolled Steel Sheets. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2017, 103, 221-229. | 0.1 | 2 |
| 69 | A Study on First Principle Calculation of Alloy Phase Diagram by Monte Carlo Simulation. Materials Research Society Symposia Proceedings, 1992, 291, 135. | 0.1 | 1 |
| 70 | Observation of Chemical State for Interstitial Solid Solution of Carbon in Low-carbon Steel by Soft X-ray Absorption Spectroscopy. ISIJ International, 2020, 60, 114-119. | 0.6 | 1 |
| 71 | Infrared Properties of the HighTcSuperconductor (La, Y)â€“Baâ€“Cuâ€“O and Laâ€“Srâ€“Cuâ€“O Compounds. Japanese Journal of Applied Physics, 1987, 26, 1011. | 0.8 | 1 |
| 72 | Correlation of Layered Structure and Superconductivity in (La, Y)â€“Baâ€“Cuâ€“O System. Japanese Journal of Applied Physics, 1987, 26, 1065. | 0.8 | 1 |

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| 73 | Dependence of Carbon Concentration and Alloying Elements on the Stability of Iron Carbides. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 352-361. | 0.1 | 1 |
| 74 | A Mechanism of Carbon-Cluster Strengthening though Atomic Simulations. Nippon Kinzoku Gakkaishi/Journal of the Japan Institute of Metals, 2020, 84, 19-27. | 0.2 | 1 |
| 75 | Crystal Structure Analysis of Top Dross in a Molten Zinc Bath by First Principle Calculation and Synchrotron X-ray Diffraction. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 205-213. | 0.1 | 0 |
| 76 | Oxygen-Intercalation Effect upon Tetragonal-LaBa2Cu3â^'xOy Compound Samples. , 1987, , 1089-1093. | | 0 |
| 77 | Importance of Controlling Microstructure Heterogeneity when Designing Steel. , 2015, , 3-9. | | 0 |
| 78 | A Determination of Carbon Solubility Limit in Bcc-Iron from Low-Temperature Age Hardening by Bayesian Inference. Tetsu-To-Hagane/Journal of the Iron and Steel Institute of Japan, 2020, 106, 807-815. | 0.1 | 0 |